WHAT IS CLAIMED IS:

1.An electroluminescence wire core comprising a flexible central electrode, luminescent layer, and a transparent and conductive layer, on the outer surface of central electrode directly coated with the luminescent layer and the transparent and conductive layer in order, granules of luminescent powder in luminescent layer wrapped by thermoplastic macromolecular polymer or synthetic resin, the thermoplastic macromolecular polymer or the synthetic resin being transparent, insulating, and dielectric, on outer surface of the transparent and conductive layer wound with an accessory electrode.

2.The electroluminescence wire core as claimed in claim 1, wherein the transparent, insulating, and dielectric thermoplastic macromolecular polymer is polyvinyl chloride, polyethylene terephthalate, polypropylene, polystyrene, polysulfone, or polycarbonate, the transparent, insulating, and dielectric synthetic resin is organic silicon resin, polyurethane, polyester resin, acrylic resin, or epoxy resin.

3.The electroluminescence wire core as claimed in claim 1, wherein the luminescent powder in the luminescent layer is made from a mixture of copper and zinc sulfide or such organic substances as poly-alkylthrophene, para-phenylethyne, and poly-alkylfluorene.

4.The electroluminescence wire core as claimed in claim 1, wherein the central electrode is made from single non-metal wire, or multiple non-metal wire adhered together using conductive adhesive, or conductive flexible tube or weaved tube made from metal or non-metal material.

5.The electroluminescence wire core as claimed in claim 1, wherein at least two fine conductive wire are wound on the outer surface of transparent and conductive layer in positive or negative spirals for serving as accessory electrode.

6.A manufacturing process concerning the electroluminescence wire core as claimed in claim 1, comprising the following steps:

1) mixing luminescent powder with transparent, insulating, and dielectric thermoplastic macromolecular polymers for granulation;

2) putting the granules formed in step 1 into plastic extrusion machine, and heating it to 140~175 ℃ for plasticizing, the plasticized granules then being extruded out of the die orifice so as to form a smooth luminescent layer on the outer surface of the central electrode after water cooling or air cooling process;

3) coating or covering a layer of transparent electrode on outer surface of the luminescent layer, and winding an accessory electrodes on the outer surface of the layer of the transparent electrode.

7.A manufacturing process concerning the electroluminescence wire core as claimed in claim 1, including the following steps:

1) putting liquid mixture of luminescent powder and synthetic resin into two or more coating machines and continuously and then agitating it, the concentration of the luminescent powder being reduced in different mixture;

2) passing the wire or conductive tube, which serving as central electrode, through an die orifice of coating machine filled with the liquid

mixture of luminescent powder and resin at high speed, after extrusion coating and drying process, the wire or conductive tube then conveyed to next coating machine for further extrusion coating;

3) drying the coated wire or conductive tube in oven at the temperature of 120~155℃;

4) coating or covering the outer surface of luminescent l with a layer of transparent electrode, and then winding the layer of transparent electrode with accessory electrode in spirals.

8. A linear luminescent body is formed by covering a layer of transparent polymer on the surface of linear luminescent core described in claim 1.

9. A row-arranged luminescent body is formed by making the two or more luminescent cores as claimed in claim 1 stand in a row-type, and then coating them with a layer of transparent polymer.

10, A lotus root shaped luminescent body is formed by coating a layer of transparent polymer on a circular combination made of the two or more luminescent cores described in claim 1.